
Understanding Autism and Neurodivergence: A Comprehensive Review for Educational Therapists

Anna T. McDonald, EdD, BCET®

This article provides a comprehensive review of current research in the field of autism, drawing insights from multiple sources including critical studies, insightful stories, primary sources, and positive media portrayals of individuals on the autism spectrum, specifically focusing on the programs Extraordinary Attorney Woo, There She Goes, and ATypical. Additionally, this review compares and contrasts historical perspectives with poignant, real-life stories explored in the book A Different Key: The Story of Autism alongside the PBS documentary of the same name. This article seeks to provide educational therapists with a deeper understanding of the autism spectrum disorder (ASD) and neurodivergence, while presenting practical strategies to inform the work of educational therapy.

As the prevalence of autism spectrum disorder (ASD) diagnoses in American children has become more common in the last few years, a resurgence of popularity on the topic of neurodivergence in popular media and culture has climbed in turn. According to the American Psychiatric Association (APA) under *Diagnostic and Statistical Manual of Mental Disorders*, a child with a diagnosis of autism must have persistent deficits in three areas of social communication: 1) deficits in social-emotional reciprocity, 2) deficits in nonverbal communicative behaviors, and, 3) deficits in developing, maintaining, and understanding relationships in multiple contexts and interaction, in addition to at least two of four types of restrictive, repetitive behaviors (APA, 2013). Current research indicates that while approximately 6.7 children in 1,000 were diagnosed with autism in 2000, that number has steadily climbed to 27.6 in 1,000 in 2020. This statistic means that one in thirty-six children in the United States is diagnosed with ASD, up from one in forty-four just two years ago, and one in one hundred fifty just 20 years ago (Anthes, 2023). Indeed, it makes sense that significant educational advancements in the field of autism and neurodivergence research have emerged which shed more light and nuance on a topic that was once taboo (Donovan & Zucker, 2016). As educational therapists (ETs), it is crucial to stay up to date on the latest findings to create a more inclusive and supportive environment for children and young adults in our care. Contemporary positive representations of people on the autism spectrum serve to advance both dialog and empathy. As a parent of two twice-exceptional (2E), neurodivergent teenagers, my personal and professional worlds collide on a very regular basis. While I stay abreast of current research in the field, I also find it helpful to look for more personal, relatable examples and modern depictions that apply to my work and give me inspiration.

In this article, I will explore groundbreaking multimedia that focuses on ASD, concentrating on one work in particular, *A Different Key: The Story of Autism*, a text co-written by veteran journalist John Donovan and award-winning TV news producer Caren Zucker in parallel with the PBS documentary of the same title, also produced by the same team. In addition, I will compare and contrast the various portrayals of autistic characters in other popular media such as the international dramatic law series *Extraordinary Attorney Woo*, family sitcom *ATypical*, and the BBC4 realistic fiction drama series, *There She Goes*. These dramatizations are completely relevant, widely accessible, and available on a number of platforms. With excellent writers and talented actors, many of whom are part of the ASD community, the respectful characterizations of behavioral traits, actual therapies, historical frameworks, and interpersonal relationships, all of which are many times more challenging to convey in a book, work together to successfully bring viewers in. Further, media that accurately depicts the experiences of children on the spectrum and also include what their families are going through can foster empathy and understanding among the wider community. This increased understanding can cultivate open communication and encourage compassion, leading to greater support for individuals with ASD as well as their families, friends, teachers, and caregivers. As ETs serving clients from the ASD community, we can learn from such portrayals as we approach intervention. This conceptualization provides a framework for treatment and can help ETs:

- **Reinforce & Utilize Positive Behavior Support:** Use positive reinforcement to encourage desired behaviors and academic achievements. Find out what your client's coursed interest might be and create a reward system based on the individual's interests which can motivate them to stay focused and engaged in learning.
- **Normalize Neurodiversity:** It can be especially powerful to seek out positive stories and portrayals of individuals on the spectrum. Watch movies, read books, listen to podcasts, and discuss real-life stories and experiences of neurodivergent individuals. This emphasizes the fact that all people, both neurotypical and neurodivergent, have strengths and challenges and normalizes neurodiversity.

IN A DIFFERENT KEY: THE STORY OF AUTISM

No better example of utilizing a strengths-based approach can be found than in this story. A finalist for the Pulitzer Prize, these beautiful, poignant stories told throughout *In a Different Key* provide a comprehensive historical narrative of autism spanning decades including the personal history of Donald Triplett of Forest, Mississippi, (the first child diagnosed with autism); the riveting tales of parents still fighting for the civil rights of their children; the history of the medical field struggling to define the autism spectrum; the controversies surrounding autism (from "refrigerator mothers" to vaccines to experimentation and institutionalization of autistic children); and the resourcefulness, grit, self-advocacy, and perseverance of

ordinary people determined to secure a place in the world for autistic children. Neurodiversity giants such as Temple Grandin, Alex Plank, and Ari Ne'eman share their personal memories as long-standing champions of ASD. *In a Different Key* effectively portrays the challenges neurodivergent individuals face in everyday life, particularly when those on the outside such as the police, teachers, co-workers, and/or neighbors fail to recognize and support their differences.

It quickly becomes evident that these challenges are further exacerbated when intersecting with race and ethnicity. Several vignettes touch upon the topic of children of color on the spectrum, recognizing the historical marginalization and disparities faced by children and families of color in accessing autism diagnosis and interventions, while providing poignant reflection of the complex intersectionality within the autism community. Historically, research on autism has primarily focused on white, non-Hispanic populations, leading to disparities in the diagnosis and access to services for children of color with autism. Recent studies have highlighted significant disparities in diagnosis, intervention, and access to appropriate services for children of color with autism compared to their white counterparts (Daniels et al., 2017; Mandell et al., 2019). These vignettes underscore the challenges encountered by African American families in securing early diagnoses and quality therapeutic services due to socio-economic factors and cultural stigmatization. For example, readers/viewers are introduced to the story of Dr. Connie Kasari, a UCLA professor whose groundbreaking research on autism has shed light on the critical need for culturally responsive interventions. Dr. Kasari's work, rooted in her own family's story, serves as a testament to the progress made in the field. Through her research, she has shown that culturally tailored interventions can significantly improve outcomes for children of color, highlighting the importance of diversity and inclusivity in autism research, intervention strategies, and advocacy. One practical suggestion for educational therapists is to incorporate cultural competency training into our practice. By gaining a deeper understanding of cultural norms, values, and perspectives of the families we work with, educational therapists can better adapt our strategies and interventions to align with the specific cultural context and needs of each client. This individualized approach not only respects the family's cultural identity, but also enhances the effectiveness of the educational therapy by promoting greater engagement, collaboration, and empathy between educational therapists, clients, and their families.

This book and its corresponding documentary are teeming with positive examples that can be easily related to the work of educational therapy. This series traces the evolution of our understanding of autism and notes the progress made towards neurodivergence acceptance. ETs can gain valuable insights from either of these works, understanding how perceptions of autism have evolved over time and the impact this has on individuals and families. Each is a stand-alone narrative that records the nuances of the human experience of people with ASD, but my recommendation for ETs is exposure to both mediums. The text provides a reference and resource chock full of valuable information for our practices, while the documentary brings these stories to life.

POSITIVE PORTRAYALS IN MEDIA SHIFTS PERSPECTIVES

In *Extraordinary Attorney Woo*, the main protagonist is a 27-year-old skilled lawyer who faces challenges in social interactions and communication but excels in the legal profession. Due to her 164 IQ, impressive capacity for memorizing information, and creative thought process, Attorney Woo, played by South Korean Actor Park Eun-bin, exemplifies in a thoughtful way, the many challenges people with ASD face as they navigate the real world. Due to the delicate nature of the role, actor Park originally turned down the role several times. The lead actor, who does not have autism herself, makes clear that she did not try to imitate any specific autistic person and was very aware of her moral responsibility not to be hurtful through her portrayal of Woo. Unsurprisingly, the series generated some controversy within the autism communities of both South Korea and the United States. While Park does depict many of the stereotypical mannerisms, preoccupations, and obsessive thought processes associated with autism, the show's acclaimed writers and producers make note that they read widely and thoroughly researched the project, consulting with many autism experts and people within the ASD community. The series portrays Woo's journey of overcoming obstacles while leveraging her unique strengths to succeed in her law career. What the show does well is to familiarize its viewers with the inner workings of autistic thought, rather than pathologizing it. Similarly, the series introduces viewers to the constructs of neurodiverse vs. neurotypical individuals and works to destigmatize how autistic individuals are viewed in South Korean society, where shame often stifles discussion of disability. Educational therapists can learn from Woo's example that neurodivergent individuals possess unique abilities and talents. By focusing on strengths and providing appropriate support, educational therapists can help clients with autism discover, develop, and utilize their unique skills, leading to increased self-confidence, just like the example of Attorney Woo, whose peers and mentors at her law firm provided this type of strengths-based support making her an even more successful lawyer. This further illustrates the power of using a strengths-based approach, which can benefit multiple domains such as school, work, and home.

By way of contrast, the BBC4 series *There She Goes* follows the life of Rosie, a young, nonverbal girl with severe autism, and her family's experiences as they navigate the challenges and joys of raising her. Based on the true family life of the show's co-writer and creator, Shaun Pye wanted to make sure that the story was not told through rose-tinted glasses and gave an authentic representation of his family narrative. While the actor, Miley Locke, playing Rosie, does not have any learning disabilities or autism herself, a number of candidates both neurodiverse and neurotypical auditioned. In multiple interviews, Pye explained that after consultation with numerous psychologists and professionals about the show, his production team decided that it was too big an ask for a young, learning-disabled actor to attempt the role of Rosie (*There She Goes*, 2018). Through powerful acting, the show authentically portrays the daily struggles faced by Rosie and her family while building empathy and understanding. In fact, Rosie's portrayal offers ETs insights into the lived experience of individuals with severe autism and

the families who care for them. It underscores the significance of compassionate support and family involvement in the therapeutic process. In addition, individuals on the autism spectrum find in characters like Rosie both validation and recognition of their experiences. Authentic representations promote empathy allowing individuals with autism to feel heard and seen, thereby reducing feelings of isolation. Shows like *There She Goes* help to counter stereotypes and misconceptions about neurodivergence because they are told from the heart and offer connections for wider audiences. Understanding the individual needs of clients like Rosie, along with the family dynamics these relationships entail, can lead to more robust and effective educational therapy.

In *Atypical*, the story of Sam Gardner (played by Keir Gilchrist) centers around the life of a high-functioning teenager on the autism spectrum as he explores the demands of adolescence, relationships, and transitioning into adulthood. *Atypical* portrays Sam's journey of self-discovery noting the importance of addressing social and emotional challenges while supporting autonomy and self-advocacy in teenagers with autism. Gilchrist's adaptation promotes a sense of belonging and solidarity, resonating with many in the ASD community as it shows both the struggles and triumphs he experiences as an autistic teenager. Sam is quite insightful, sharing, "Sometimes I wish I was 'normal', but nobody is normal" or "sometimes to be accepted, you need to stand out." Sam's quotes celebrate the uniqueness that defines him in parallel to his unwavering commitment to being his true self. Sam's parents Elsa and Doug demonstrate acceptance as they educate themselves about autism and seek guidance from allied professionals, showing a commitment to learning and adapting to Sam's needs. The Gardners model open communication and encourage Sam to express his feelings. Throughout the series, they create a safe-space for him to talk about his experiences, fears, goals, and any problems he may face, while championing his pursuit of independence. They encourage him to take on responsibilities and make decisions, even if it means making mistakes. His parents emphasize a growth mindset demonstrating the importance of building self-esteem and promoting agency. They are his biggest advocates, fighting for his rights to ensure he receives the appropriate accommodations in various aspects of life including education and employment. Sam's younger sister Casey stands out as a supportive sibling who understands her brother's challenges, but she advocates for him when needed. Casey's protective and caring demeanor serves as a heartwarming example of how siblings play a vital role in supporting neurodiverse family members. Casey is navigating her own teenage journey, but whenever Sam has a meltdown, even as a young-adult, his family responds with patience and compassion. They avoid blaming him for his struggles and instead focus on finding solutions and providing emotional support. By depicting a family that embraces and supports Sam's neurodiversity, with love, understanding, patience, and commitment, *Atypical* provides viewers with an empathetic lens which may impact their world view. The positive representations of family in *Atypical* emphasize the significant benefits of family involvement in the lives of individuals on the autism spectrum, in therapeutic process, and the need for direct, open communication between therapists, clients, and the families supporting them.

PRACTICAL RESEARCH-BASED STRATEGIES FOR ET'S WORKING WITH CLIENTS WITH ASD

1. Individualized Education Plan (IEP):

Collaborate with the school's special education team to develop an individualized education plan (IEP) /504 / Official Accommodations Plan (OAP) for each student on the spectrum. The plan should outline specific learning goals, accommodations, and modifications tailored to the student's strengths, challenges, and learning style. Remember autism is a communication disorder, and students may have a very wide range of needs. One example of an accommodation might be finding alternatives to oral projects to show mastery.

2. Visual Supports:

Utilize visual aids such as visual schedules, social stories, and visual cues to enhance communication and comprehension. Visual supports can help individuals on the spectrum better understand expectations, routines, and social situations, reducing anxiety and promoting independence.

3. Social Skills Training:

Implement evidence-based social skills training programs that teach social cues, perspective-taking, and problem-solving skills. Role-playing and group activities can provide opportunities for practice in real-life situations, facilitating social interactions and friendships.

4. Sensory-Friendly Environment:

Design the therapy space and classroom to be sensory-friendly, considering lighting, noise levels, and the availability of sensory tools (e.g., fidget toys, noise-canceling headphones) to help individuals regulate their sensory experiences.

5. Task Breakdown and Pacing:

Break down complex tasks or assignments into smaller, manageable steps. Use clear and concise instructions, and provide additional time or breaks if needed to prevent overwhelm and support successful task completion.

6. Structured Routines:

Establish predictable and structured routines, as individuals on the spectrum often benefit from knowing what to expect. Consistent routines can reduce anxiety and promote a sense of security in the learning environment.

7. Peer Support and Inclusion:

Encourage peer support and inclusion by fostering opportunities for neurotypical peers to engage with individuals on the spectrum in collaborative activities. This promotes social integration and can help build understanding and empathy among all students.

8. Executive Functioning Support:

Teach organizational and executive functioning skills, such as time management, planning, and self-monitoring. Strategies

like using checklists and digital organizers can aid in improving executive functioning abilities.

9. Parent Collaboration:

Maintain open communication with parents or caregivers to understand the child's needs and progress outside of the therapy sessions. Involve parents in setting goals and implementing strategies, creating a consistent support system for the individual.

10. Flexibility and Individualization:

Remember that each individual on the autism spectrum is unique, and what works for one may not work for another. Be flexible and willing to adapt your approach to meet the specific needs of each student.

By implementing practical, research-based strategies, ETs can create an inclusive and supportive learning environment for children and young adults on the autism spectrum. Tailoring intervention and educational therapy goals to a client's individual strengths and challenges, promoting social skills development, and collaborating with parents, educators, and allied professionals are key components of effective therapeutic support for neurodivergent populations. While it can be difficult to stay informed on the latest autism research and current best practices for educational therapy, these books and media depictions are both relevant and accessible, further helping to normalize the whole idea of neurodivergence, which builds empathy writ large. People see their family members, their friends, and themselves in these stories. Representation of individuals on the autism spectrum in the media is essential for many reasons. First, it helps to break stereotypes and misconceptions about autism, promoting a more accurate and authentic understanding of the spectrum's diversity. Likewise, media representation is a powerful tool to share real life stories that advocate for and promote neurodiversity. Having a balance of unique perspectives, a comprehensive view of the autism spectrum, and being informed on a wide-range of practices as offered in each of these narratives can lead to improved outcomes and better experiences for educational therapists supporting neurodivergent clients.

REFERENCES

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). <https://doi.org/10.1176/appi.books.9780890425596>
- Anthes, E. (2023, March). Autism prevalence rises again, study finds. *New York Times*. <https://www.nytimes.com/2023/03/23/health/autism-children-diagnosis.html>
- Daniels, A. M., Mandell, D. S., & Beidas, R. S. (2017). Explaining disparities in autism care: A multilevel framework. *American Journal of Public Health, 107*(5), 681-685.
- Donovan, J., & Zucker, C. (2016). *In a different key: The story of autism*. Broadway Books, Crown Publishing Group.
- Donovan, J. & Zucker, C. (Executive Producers). (2017). *In a different key: The story of autism* [Documentary]. PBS.
- Flippin, M., Reszka, S., & Watson, L. R. (2010). Effectiveness of the Picture Exchange Communication System (PECS) on communication and speech for children with autism spectrum disorders: A meta-analysis. *American Journal of Speech-Language Pathology, 19*(2), 178-195. doi:10.1044/1058-0360(2010/09-0034)
- Gordon, S., & Rashid, R. (Executive Producers). (2021). *ATypical* [Television series]. Exhibit A Weird Brain Inc., Sony Pictures Television.
- Hendrickx, S. (2015). *Women and girls with autism spectrum disorder: Understanding life experiences from early childhood to old age*. Jessica Kingsley Publishers.
- Lee, J., & Lee, J. (Executive Producers). (2022). *Extraordinary Attorney Woo* [Television series]. (2020). AStory Productions.
- Mountford, C., & Horgan, S. (Executive Producers). (2018). *There she goes* [Television series]. Merman Television Ltd. for BBC Four.
- Mandell, D. S., Listerud, J., Levy, S. E., & Pinto-Martin, J. A. (2002). Race differences in the age at diagnosis among Medicaid-eligible children with autism. *Journal of the American Academy of Child & Adolescent Psychiatry, 41*(12), 1447-1453.
- Nichols, S. L., Moravik, G. M., & Tetenbaum, S.P. (2009). *Girls growing up on the autism spectrum: What parents and professionals should know about the pre-teen and teenage years*. Jessica Kingsley Publishers.
- Ramdoss, S., Lang, R., Mulloy, A., Franco, J., O'Reilly, M., Didden, R., & Lancioni, G. (2011). Use of computer-based interventions to teach communication skills to children with autism spectrum disorders: A systematic review. *Journal of Behavioral Education, 20*(1), 55-76. doi:10.1007/s10864-010-9118-6

Ramos, D.-R. (2019, February 11). 'There she goes' creator did not want to "sugarcoat" his real-life experiences raising a child with a disability. Deadline. <https://deadline.com/2019/02/there-she-goes-david-tennant-jessica-hynes-shaun-pye-tca-1202553493/>

Reichow, B. (2012). Overview of meta-analyses on early intensive behavioral intervention for young children with autism spectrum disorders. *Journal of Autism and Developmental Disorders*, 42(4), 512-520. doi:10.1007/s10803-011-1218-9

There She Goes. (2018, October 13). *Shaun Pye interview*. British Comedy Guide. https://www.comedy.co.uk/tv/there_she_goes/interviews/shaun_pye/

White, S. W., Keonig, K., & Scahill, L. (2007). Social skills development in children with autism spectrum disorders: A review of the intervention research. *Journal of Autism and Developmental Disorders*, 37(10), 1858-1868. doi:10.1007/s10803-006-0320-x

Anna T. McDonald, EdD, BCET®, holds a BA in broadcast journalism (SFSU), two MA degrees in educational communication and technology (NYU) and in language, literacy and culture (SFSU), and a doctorate in educational leadership, concentrating in special education (USF). A fully credentialed teacher and administrator, Anna is the BCET at Sacred Heart Preparatory. As a volunteer for AET, Anna is a member of the Webinar Committee, Social Justice Subcommittee, is the Ethics Exam Chair, helped to develop the new AET website, and is a member of this journal's Editorial Board. Anna is the mother of two twice-exceptional teenagers.